Reviewer's report

Title: Epidemiology of acute kidney injury in Hungarian intensive care units: a multicenter, prospective, observational study

Version: 1 Date: 29 October 2010

Reviewer: Marlies Ostermann

Reviewer's report:

Major compulsory revisions:
1. The authors used the AKIN classification to define AKI. Transplant patients and patients on dialysis were excluded. How did they deal with patients with pre-existing chronic kidney disease? Does the study include any patients with AKI on the background of chronic kidney disease?
2. Did the authors assess trends in serum creatinine in both directions, ie. how did they deal with patients with a raised serum creatinine on admission to ICU which subsequently fell?
3. What was the timing of AKI? Was there a difference between AKI within the first 48 hours of ICU admission versus AKI which developed later?
4. Figure 1: the authors state that 39% of AKI was related to hypovolaemia. Strictly speaking, these patients do not fulfill the criteria of the AKIN classification. According to the AKIN criteria, AKI can only be diagnosed “after obstruction or other easily reversible causes of reduced urine output have been excluded”. The authors should comment on whether this criterion of the AKIN classification was fulfilled.
5. Page 6, last sentence: What is the evidence for the statement “The higher mortality of AKI in Hungarian ICUs can be explained by factors, such as higher incidence of malignancy and non-uniform treatment principles”?
6. Page 7: The discussion includes data on dose of renal replacement therapy. It would be more appropriate to include this information in the Results section.
7. The discussion should include a paragraph on limitations of the study.
8. Tables: The tables should include percentages, either instead or in addition to the actual number of patients. In addition, I am not sure how useful it is to distinguish between male and female patients in all categories.

Minor essential revision
1. Page 6, 4th line: I would suggest to say "AKI has long been recognised as a complication after surgery" instead of "surgical complication".

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.